

M170ETN01.1

AU OPTRONICS CORPORATION

(V)	Preliminary Specification
()	Final Specification

Module	17" Color TFT-LCD
Model Name	M170ETN01.1

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Note: This Specification is subject to change without notice.	AU

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AU Optronics corporation		



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Record of Revision

Version	Date	Page	Old description	New Description	Remark
0.0	2013/2/6	All	First version release	-	
0.1	2013/4/8	7	Color Coordinates is TBD	Update Color Coordinates	



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1 Handling Precautions

- 1) Since front polarizer is easily damaged, pay attention not to scratch it.
- 2) Be sure to turn off power supply when inserting or disconnecting from input connector.
- 3) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
- 4) When the panel surface is soiled, wipe it with absorbent cotton or other soft cloth.
- 5) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface.
- 6) Since CMOS LSI is used in this module, take care of static electricity and insure human earth when handling.
- 7) Do not open or modify the Module Assembly.
- 8) Do not press the reflector sheet at the back of the module to any directions.
- 9) In case a TFT-LCD Module has to be put back into the packing container slot after once it was taken out from the container, do not press the center of the LED lightbar edge. Otherwise the TFT-LCD Module may be damaged.
- 10) Insert or pull out the interface connector, be sure not to rotate nor tilt it of the TFT-LCD Module.
- 11) Do not twist nor bend the TFT -LCD Module even momentary. It should be taken into consideration that no bending/twisting forces are applied to the TFT-LCD Module from outside. Otherwise the TFT-LCD Module may be damaged.
- 12) Please avoid touching COF position while you are doing mechanical design.
- 13) When storing modules as spares for a long time, the following precaution is necessary: Store them in a dark place. Do not expose the module to sunlight or fluorescent light. Keep the temperature between 5°C and 35°C at normal humidity.

2 General Description

This specification applies to the 17 inch wide Color a-Si TFT-LCD Module M170ETN01.1. The display supports the SXGA+ (1280(H) x 1024(V)) screen format and 16.7M colors (RGB 6-bits + Hi-FRC data). The input interface is Dual channel LVDS and this module doesn't contain an driver board for backlight.

2.1 Display Characteristics

The following items are characteristics summary on the table under 25°C condition:

ITEMS	Unit	SPECIFICATIONS
Screen Diagonal	[mm]	432 (17.0")
Active Area	[mm]	337.920(H) × 270.336(V)
Pixels H x V	-	1280 × 3(RGB) × 1024
Pixel Pitch	[mm]	0.264(per one triad) × 0.264
Pixel Arrangement	-	R.G.B. Vertical Stripe
Display Mode	-	Normally White
White Luminance (Center)	[cd/m ²]	250 (Typ.)
Contrast Ratio	-	1000 : 1 (Typ.)
Response Time	[msec]	5 (Typ., on/off)
Power Consumption	[Watt]	9.91 (Typ.)
(LCD Module + Backligh unit)		LCD module: PDD (Typ.)=3 @ Black pattern,Fv=60Hz
		Backlight unit: P _{BLU} (Typ.) =6.91 @Is=60mA
Weight	[Grams]	1273 (Typ.)
Outline Dimension	[mm]	358.5(H) x 296.5(V) x 10.3(D) (Typ.)
Electrical Interface	-	Dual Channel LVDS
Support Color	-	16.7M colors (RGB 6-bits +Hi-FRC data)
Surface Treatment	-	Anti-glare type, Hardness 3H
Temperature Range		
Operating	[°C]	0 to +50
Storage (Shipping)	[°C]	-20 to +60
RoHS Compliance	-	RoHS Compliance
TCO Compliance	-	TCO6.0 Compliance



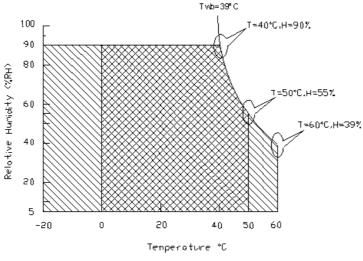
2.2 Absolute Maximum Rating of Environment

Permanent damage may occur if exceeding the following maximum rating.

Symbol	Description	Min.	Max.	Unit	Remark
TOP	TOP Operating Temperature		+50	[°C]	Note 2-1
TGS	GS Glass surface temperature (operation)		+65	[°C]	Note 2-1 Function judged only
HOP Operation Humidity		5	90	[%RH]	Note 2-1
TST	Storage Temperature	-20	+60	[°C]	
HST	Storage Humidity	5	90	[%RH]	

Note 2-1: Temperature and relative humidity range are shown as the below figure.

- 1. 90% RH Max (Ta ≤39°C)
- 2. Max wet-bulb temperature at 39°C or less. (Ta \leq 39°C)
- 3. No condensation



Operating Range



Storage Range



2.3 Optical Characteristics

The optical characteristics are measured on the following test condition.

Test Condition:

1. Equipment setup: Please refer to Note 2-2.

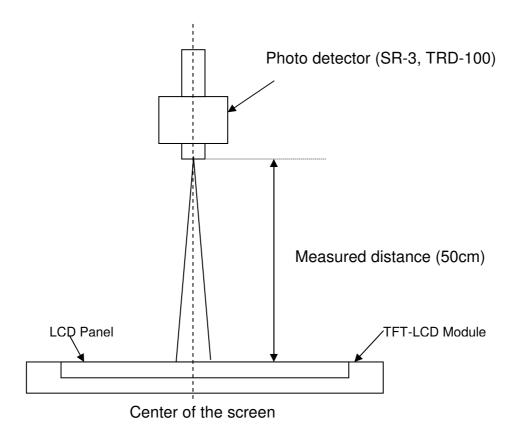
2. Panel Lighting time: 30 minutes

3. VDD=5.0V, Fv=60Hz,Is=60mA,Ta=25 $^{\circ}$ C

Symbol	Description			Тур.	Max.	Unit	Remark
L _w	White Luminance (Center of screen)			250	-	[cd/m2]	Note 2-2 By SR-3
L _{uni}	Luminance Uniformit	y (9 points)	75	80	-	[%]	Note 2-3 By SR-3
CR	Contrast Ratio (Cente	er of screen)	600	1000	1	-	Note 2-4 By SR-3
θ_{R}	Horizontal Viewing Angle	Right	75	85	-		
θ_{L}	(CR=10)	Left	75	85	-		
Φ_{H}	Vertical Viewing Angle	Up	70	80	-		
$\Phi_{ t L}$	(CR=10)	Down	70	80	-	[degree]	Note 2-5
θ_{R}	Horizontal Viewing Angle	Right	75	88	-	[3]	By SR-3
θL	(CR=5)	Left	75	88	1		
Φ_{H}	Vertical Viewing Angle	Up	70	85	-		
$\Phi_{ t L}$	(CR=5)	Down	70	85	ı		
T_R		Rising Time	-	3.8	5.5		
T_F	Response Time	Falling Time	-	1.2	2.5	[msec]	Note 2-6
-		Rising + Falling	-	5	8		By TRD-100
R _x		Red x	0.615	0.645	0.675		
R_{y}		Red y	0.303	0.333	0.363		
G _x		Green x	0.290	0.320	0.350		
Gy	Color Coordinates	Green y	0.596	0.626	0.656		
B _x	(CIE 1931)	Blue x	0.123	0.153	0.183	-	By SR-3
Ву		Blue y	0.027		0.087		
W _x		White x	0.283	0.313	0.343		
W _v		White y	0.299	0.329	0.359		
CT	Crosstalk			-	1.5	[%]	Note 2-7 By SR-3
F _{dB}	Flicker (Center of	screen)	-	-	-20	[dB]	Note 2-8 By SR-3



Note 2-2: Equipment setup :

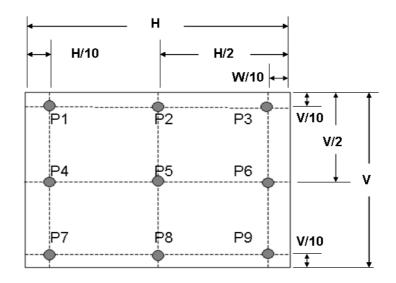


Note 2-3: Luminance Uniformity Measurement

Definition:

 $Luminance Uniformity = \frac{Minimum Luminance of 9 Points (P1 \sim P9)}{Maximum Luminance of 9 Points (P1 \sim P9)}$

a. Test pattern: White Pattern



Note 2-4: Contrast Ratio Measurement

Definition:

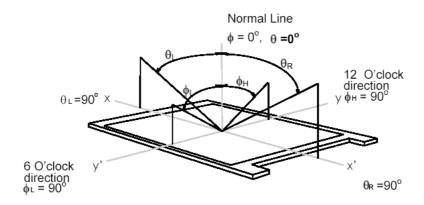
Contrast Ratio = Luminance of White pattern
Luminance of Black pattern

a. Measured position: Center of screen (P5) & perpendicular to the screen $(\theta=\Phi=0^{\circ})$

Note 2-5: Viewing angle measurement

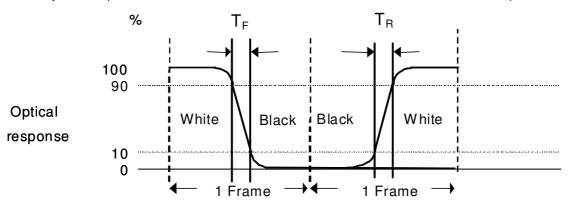
Definition: The angle at which the contrast ratio is greater than 10 & 5.

a. Horizontal view angle: Divide to left & right ($\theta_L \& \theta_R$) Vertical view angle: Divide to up & down ($\Phi_H \& \Phi_L$)



Note 2-6: Response time measurement

The output signals of photo detector are measured when the input signals are changed from "Black" to "White" (rising time, T_R), and from "White" to "Black" (falling time, T_F), respectively. The response time is interval between the 10% and 90% of optical response. (*Black & White color definition: Please refer section 3.4.3*)



Note 2-7: Crosstalk measurement

Definition:

 $CT = Max. (CT_H, CT_V);$

Where

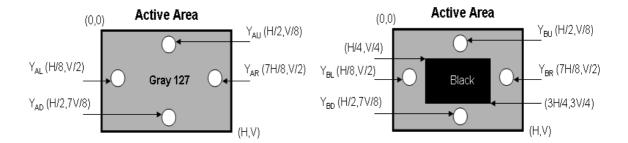
a. Maximum Horizontal Crosstalk:

$$CT_H = Max. (|Y_{BL} - Y_{AL}| / Y_{AL} \times 100 \%, |Y_{BR} - Y_{AR}| / Y_{AR} \times 100 \%);$$

Maximum Vertical Crosstalk:

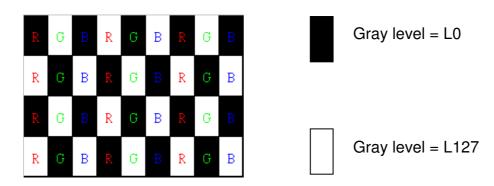
$$CT_V = Max. (|Y_{BU} - Y_{AU}|/Y_{AU} \times 100 \%, |Y_{BD} - Y_{AD}|/Y_{AD} \times 100 \%);$$

b. Y_{AU} , Y_{AD} , Y_{AL} , Y_{AR} = Luminance of measured location without Black pattern Y_{BU} , Y_{BD} , Y_{BL} , Y_{BR} = Luminance of measured location with Black pattern



Note 2-8: Flicker measurement

a. Test pattern: It is listed as following.



R: Red, G: Green, B:Blue

b. Measured position: Center of screen (P5) & perpendicular to the screen ($\theta=\Phi=0^{\circ}$)

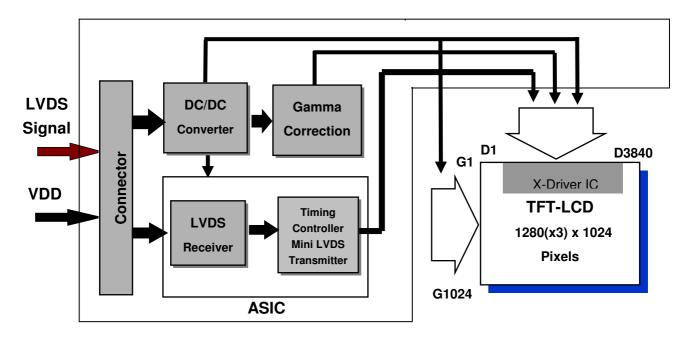


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3 TFT-LCD Module

3.1 Block Diagram

The following shows the block diagram of the 17 inch Color TFT-LCD Module.



Control Board

3.2 Interface Connection

3.2.1 Connector Type

TFT-LCD Connector	Manufacturer	P-TWO	STM	JAE	
TT T-LOD Gottinector	Part Number	AL230F-A0G1D-P	MSCKT2407P30HB	FI-XB30SSRLAHF16	
Mating Connector	Manufacturer	JAE			
Mating Connector	Part Number	FI-X30HL (Locked Type)			

3.2.2 Connector Pin Assignment

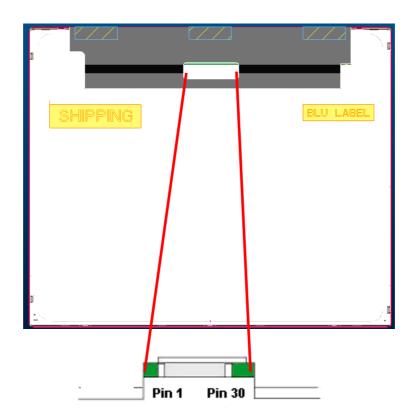
PIN#	Symbol	Description	Remark
1	RxO0-	Negative LVDS differential data input (Odd data)	
2	RxO0+	Positive LVDS differential data input (Odd data)	
3	RxO1-	Negative LVDS differential data input (Odd data)	
4	RxO1+	Positive LVDS differential data input (Odd data)	
5	RxO2-	Negative LVDS differential data input (Odd data)	
6	RxO2+	Positive LVDS differential data input (Odd data)	
7	GND	Ground	
8	RxOCLK-	Negative LVDS differential clock input (Odd clock)	
9	RxOCLK+	Positive LVDS differential clock input (Odd clock)	
10	RxO3-	Negative LVDS differential data input (Odd data)	
11	RxO3+	Positive LVDS differential data input (Odd data)	
12	RxE0-	Negative LVDS differential data input (Even data)	
13	RxE0+	Positive LVDS differential data input (Even data)	
14	GND	Ground	
15	RxE1-	Negative LVDS differential data input (Even data)	
16	RxE1+	Positive LVDS differential data input (Even data)	
17	GND	Ground	
18	RxE2-	Negative LVDS differential data input (Even data)	
19	RxE2+	Positive LVDS differential data input (Even data)	
20	RxECLK-	Negative LVDS differential clock input (Even clock)	
21	RxECLK+	Positive LVDS differential clock input (Even clock)	
22	RxE3-	Negative LVDS differential data input (Even data)	
23	RxE3+	Positive LVDS differential data input (Even data)	
24	GND	Ground	
25	NC	No connection (for AUO test only. Do not connect)	
26	NC	No connection (for AUO test only. Do not connect)	



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27	NC	No connection (for AUO test only. Do not connect)
28	VDD	Power Supply Input Voltage
29	VDD	Power Supply Input Voltage
30	VDD	Power Supply Input Voltage







3.3 Electrical Characteristics

3.3.1 Absolute Maximum Rating

Permanent damage may occur if exceeding the following maximum rating.

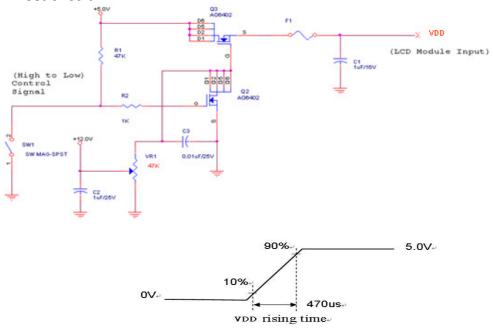
Symbol	Description	Min	Max	Unit	Remark
VDD	Power Supply Input Voltage	GND-0.3	6.0	[Volt]	Ta=25°ℂ

3.3.2 Recommended Operating Condition

Symbol	Description	Min	Тур	Max	Unit	Remark
VDD	Power supply Input voltage	4.5	5.0	5.5	[Volt]	
IDD	Power supply	ı	0.6	0.72	[A]	VDD= 5.0V, Black Pattern, Fv=60Hz
טטו	Input Current (RMS)		0.72	0.87	[A]	VDD= 5.0V, Black Pattern, Fv=75Hz
PDD	VDD Power	ı	3	3.6	[Watt]	VDD= 5.0V, Black Pattern, Fv=60Hz
FDD	Consumption		3.6	4.32	[Watt]	VDD= 5.0V, Black Pattern, Fv=75Hz
IRush	Inrush Current	-	-	3.0	[A]	Note 3-1
VDDrp	Allowable VDD Ripple Voltage	-	-	500	[mV]	VDD= 5.0V, Black Pattern, Fv=75Hz

Note 3-1: Inrush Current measurement:

Test circuit:



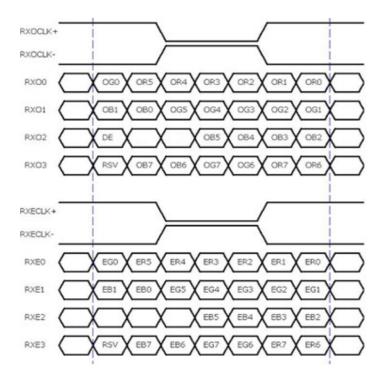
The duration of VDD rising time: 470us.

3.4 Signal Characteristics

3.4.1 LCD Pixel Format

		1			2			1	27	9	12	28	0
1st Line	R	G	В	R	G	В		R	G	В	R	G	В
									:				
					•				:			•	
		•			•		· -		•			•	
1024th Line	R	G	В	R	G	В		R	G	В	R	G	В

3.4.2 LVDS Data Format



8 Bit Color Bit Order											
MSB	ISB R7 G7 B7										
	R6	G6	B6								
R5 G5 B5											
	R4	G4	B4								
	R3	G3	В3								
	R2	G2	B2								
R1 G1 B1											
LSB	LSB R0 G0 B0										

Note 3-2:

- a. O = "Odd Pixel Data" E = "Even Pixel Data"
- b. Refer to 3.4.1 LCD pixel format, the 1st data is 1 (Odd Pixel Data), the 2nd data is 2 (Even Pixel Data) and the last data is 1280 (Even Pixel Data).



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3.4.3 Color versus Input Data

The following table is for color versus input data (8bit). The higher the gray level, the brighter the color.

												Col	or Inp	out D	ata											
Color	Gray Level	RED data (MSB :R7, LSB :R0)					GREEN data (MSB:G7, LSB:G0)								data LSE)		Remark							
		R7	R6	R5	R4	R3	R2	R1	R0	G7	G6	G5	G4	G3	G2	G1	G0	В7	В6	B5	В4	ВЗ	B2	B1	В0	
Black	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
White	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Gray 127	-	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	
	ம	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Black
Red	:		• • •			:	• • •			:	• •	• • •	:		:	:	:			:	:	:	:	:	:	
	L255	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ம	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Black
Green	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
	L255	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	
	ம	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Black
Blue	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
	L255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	



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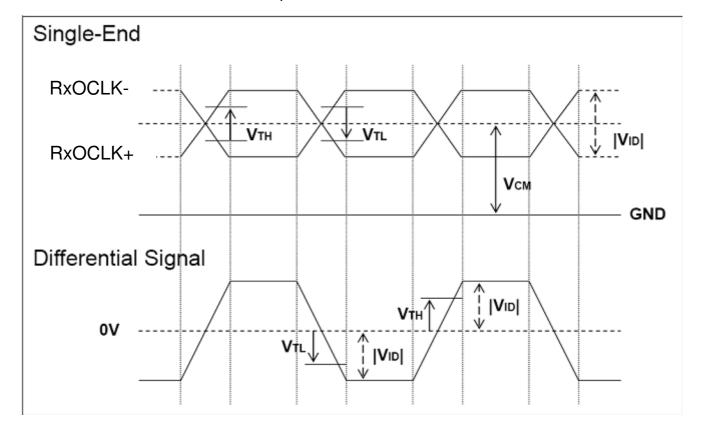
3.4.4 LVDS Specification

a. DC Characteristics:

Symbol	Description	Min	Тур	Max	Units	Condition
V_{TH}	LVDS Differential Input High Threshold	ı	1	+100	[mV]	V _{CM} = 1.2V
V_{TL}	LVDS Differential Input Low Threshold	-100	-	-	[mV]	V _{CM} = 1.2V
V _{ID}	LVDS Differential Input Voltage	100	ı	600	[mV]	
V _{CM}	LVDS Common Mode Voltage	+1.0	+1.2	+1.5	[V]	V_{TH} - $V_{TL} = 200$ m V

LVDS Signal Waveform:

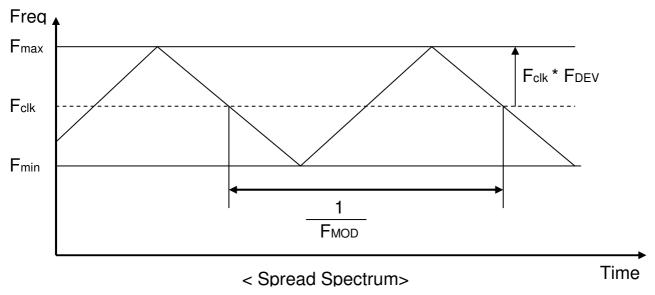
Use RxOCLK- & RxOCLK+ as example.





b. AC Characteristics:

Symbol	Description	Min	Max	Unit	Remark
F _{DEV}	Maximum deviation of input clock frequency during Spread Spectrum	-	± 3	%	
F _{MOD}	Maximum modulation frequency of input clock during Spread Spectrum	-	200	KHz	



Fclk: LVDS Clock Frequency

3.4.5 Input Timing Specification

It only support DE mode, and the input timing are shown as the following table.

Symbol	Descript	ion	Min.	Тур.	Max.	Unit	Remark
Tv		Period	1036	1066	1873	Th	
Tdisp (v)	Vertical Section	Active	1024	1024	1024	Th	
Tblk (v)		Blanking	12	42	849	Th	
Fv		Frequency	50	60	76	Hz	
Th		Period	730	844	1320	Tclk	
Tdisp (h)	Horizontal Section	Active	640	640	640	Tclk	
Tblk (h)		Blanking	90	204	680	Tclk	
Fh		Frequency	37.8	54	68.4	KHz	Note 3-3
Tclk	LVDS Clock	Period	50	60	76	ns	1/Fclk
Fclk	2,20,0,000	Frequency	51.8	64	93.7	MHz	Note 3-4

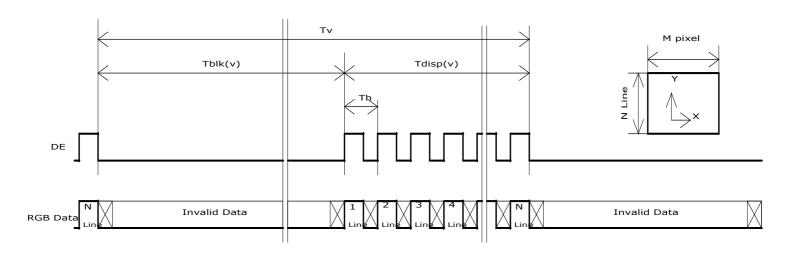
Note 3-3: The equation is listed as following. Please don't exceed the above recommended value.

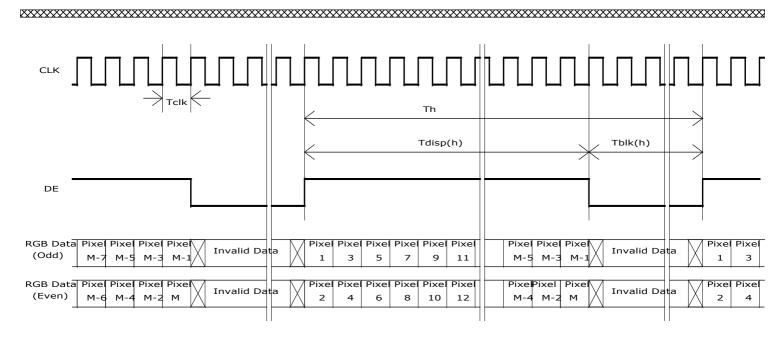
```
Fh (Min.) = Fclk (Min.) / Th (Min.);
Fh (Typ.) = Fclk (Typ.) / Th (Typ.);
Fh (Max.)= Fclk (Max.) / Th (Min.);
```

Note 3-4: The equation is listed as following. Please don't exceed the above recommended value.

```
Fclk (Min.) = Fv (Min.) x Th (Min.) x Tv (Min.);
Fclk (Typ.) = Fv (Typ.) x Th (Typ.) x Tv (Typ.);
Fclk (Max.) = Fv (Max.) x Th (Typ.) x Tv (Typ.);
```

3.4.6 Input Timing Diagram



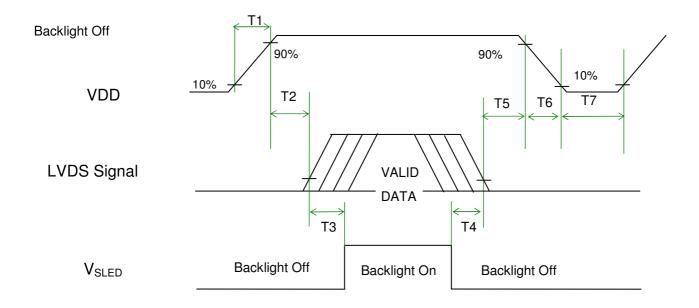




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3.5 Power ON/OFF Sequence

VDD power,LVDS signal and backlight on/off sequence are as following. LVDS signals from any system shall be Hi-Z state when VDD is off.



Power Sequence Timing

Symbol		Value		linit	Remark
Symbol	Min.	Тур.	Max.	Unit	
T1	0.5	-	10	[ms]	
T2	0	-	50	[ms]	
Т3	500	-	-	[ms]	
T4	100	-	-	[ms]	
T5	0		50	[ms]	Note 3-5 Note 3-6
T6	0	-	150	[ms]	Note 3-6
T7	1000	-	-	[ms]	

Note 3-5: Recommend setting T5 = 0ms to avoid electronic noise when VDD is off.

Note 3-6: During T5 and T6 period, please keep the level of input LVDS signals with Hi-Z state.

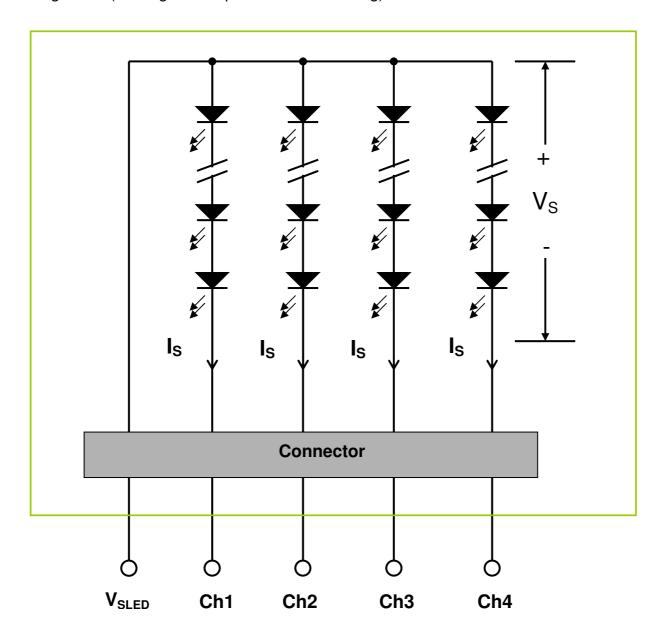


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4 Backlight Unit

4.1 Block Diagram

The following shows the block diagram of the 17 inch Backlight Unit. And it includes 36 pcs LED in the LED light bar. (4 strings and 9 pcs LED of one string).



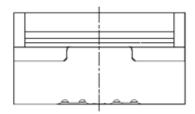
4.2 Interface Connection

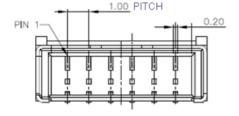
4.2.1 Connector Type

Backlight Connector	Manufacturer	ENTERY
Buoking it Connector	Part Number	3707K-S06N-21R
Mating Connector	Manufacturer	ENTERY
Mating Connector	Part Number	H112K-P06N-13B (Locking type)

Backlight Connector dimension:

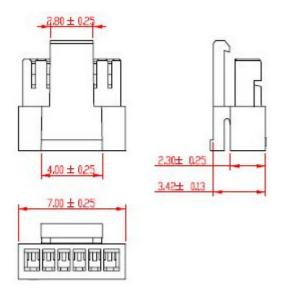
 $H \times V \times D = 13.9 \times 3.00 \times 4.25$, Pitch = 1.0(unit = mm)

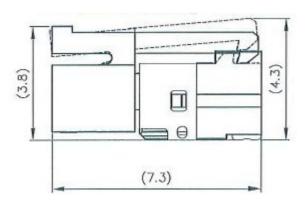






Mating Connector dimension:



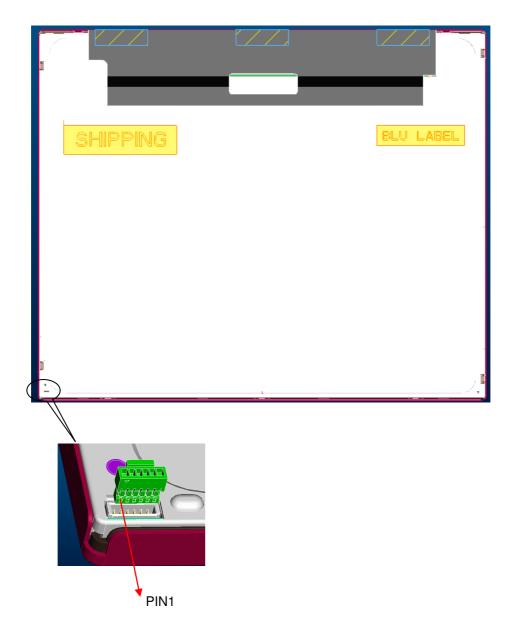




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4.2.2 Connector Pin Assignment

Pin#	n# Symbol Description						
1	Ch1	LED Current Feedback Terminal (Channel 1)					
2	2 Ch2 LED Current Feedback Terminal (Channel 2)						
3	3 V _{SLED} LED Power Supply Voltage Input Terminal						
4	4 V _{SLED} LED Power Supply Voltage Input Terminal						
5	Ch3	LED Current Feedback Terminal (Channel 3)					
6	6 Ch4 LED Current Feedback Terminal (Channel 4)						



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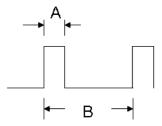
4.3 Electrical Characteristics

4.3.1 Absolute Maximum Rating

Permanent damage may occur if exceeding the following maximum rating.

(Ta=25°C)

Symbol	Description	Min	Max	Unit	Remark
			90	[mA]	100% duty ratio
ls	LED String Current	0	150	[mA]	Duty ratio≦ 10% Pulse time=10 ms



Duty ratio= (A / B) X 100%; (A: Pulse time, B: Period)

4.3.2 Recommended Operating Condition

(Ta=25°C)

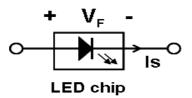
Symbol	Description	Min.	Тур.	Max.	Unit	Remark
Is	LED String Current	-	60	66	[mA]	100% duty ratio of LED chip
Vs	LED String Voltage	25.2	28.8	32.4	[Volt]	Is=60mA @ 100% duty ratio; <i>Note 4-1</i>
ΔVs	Maximum Vs Voltage Deviation of light bar	-	-	1.8	[Volt]	Is=60mA @ 100% duty ratio; <i>Note 4-2</i>
P _{BLU}	LED Light Bar Power Consumption	-	6.91	8.55	[Watt]	Note 4-3
LT _{LED}	LED Life Time	30,000	-	-	[Hour]	Note 4-4



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- **Note 4-1:** Vs (Typ.) = V_F (Typ.) X LED No. (one string);
 - a. V_F: LED chip forward voltage, V_F (Min.)=2.8V, V_F(Typ.)=3.2V, V_F(Max.)=3.6V
 - b. The same euqation to calculate Vs(Min.) & Vs(Max.) for respective $V_F(Min.)$ & $V_F(Max.)$;



- **Note 4-2:** ΔVs (Max.) = $\Delta V_F X LED$ No. (one string);
 - a. $\Delta V_{F:}$ LED chip forward voltage deviation; (0.2 V, each Bin of LED V_F)
- **Note 4-3:** P_{BLU} (Typ.) = Vs (Typ.) X Is (Typ.) X 4; (4 is total String No. of LED Light bar) P_{BLU} (Max.) = Vs (Max.) X Is (Max.) X 4;
- **Note 4-4:** Definition of life time:
 - a. Brightness of LED becomes to 50% of its original value
 - b. Test condition: Is = 60mA and 25° C (Room Temperature)

5 Reliability Test

AUO reliability test items are listed as following table. (Bare Panel only)

Items	Condition	Remark
Temperature Humidity Bias (THB)	Ta= 50°C, 80%RH, 300hours	
High Temperature Operation (HTO)	Ta= 50°C, 50%RH, 300hours	
Low Temperature Operation (LTO)	Ta= 0°C, 300hours	
High Temperature Storage (HTS)	Ta= 60°C, 300hours	
Low Temperature Storage (LTS)	Ta= -20°C, 300hours	
Vibration Test (Non-operation)	Acceleration: 1.5 Grms Wave: Random Frequency: 10 - 200 Hz Sweep: 30 Minutes each Axis (X, Y, Z)	
Shock Test (Non-operation)	Acceleration: 50 G Wave: Half-sine Active Time: 20 ms Direction: ±X, ±Y, ±Z (one time for each Axis)	
Drop Test	Height: 61 cm, package test	
Thermal Shock Test (TST)	-20°C/30min, 60°C/30min, 100 cycles	Note 5-1
On/Off Test	On/10sec, Off/10sec, 30,000 cycles	
ESD (Electro Static Discharge)	Contact Discharge: \pm 15KV, 150pF(330 Ω) 1sec, 8 points, 25 times/ point.	Note 5-2
LSD (LIECTIO Static Discharge)	Air Discharge: \pm 15KV, 150pF(330 Ω) 1sec 8 points, 25 times/ point.	NOIE 5-2
Altitude Test	Operation:18,000 ft Non-Operation:40,000 ft	

- **Note 5-1**: a. A cycle of rapid temperature change consists of varying the temperature from -20° C to 60° C, and back again. Power is not applied during the test.
 - b. After finish temperature cycling, the unit is placed in normal room ambient for at least 4 hours before power on.

Note 5-2: EN61000-4-2, ESD class B: Certain performance degradation allowed

No data lost Self-recoverable No hardware failures.

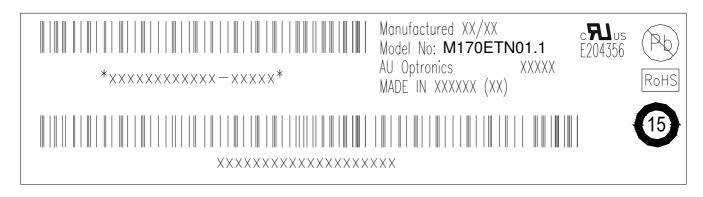


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6 Shipping Label

The label is on the panel as shown below:

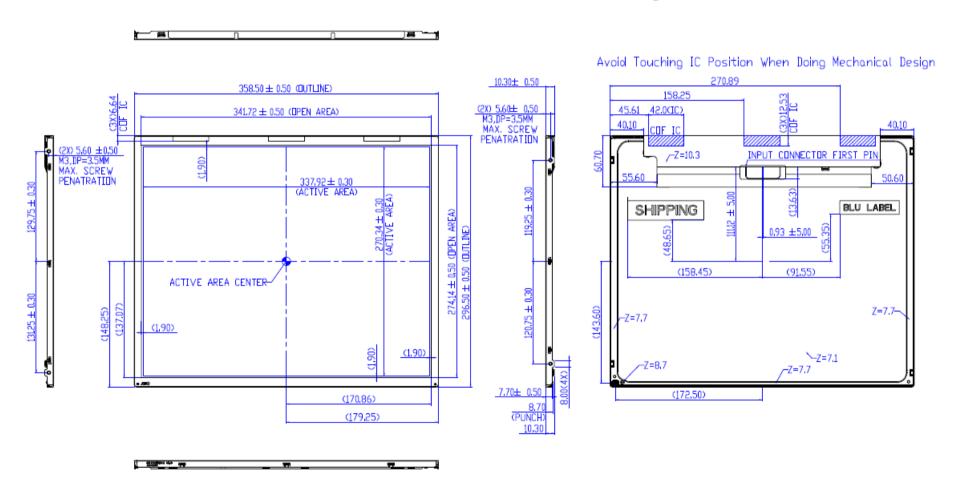


- Note 6-1: For Pb Free products, AUO will add 🔊 for identification.
- Note 6-2: For RoHS compatible products, AUO will add RoHS for identification.
- Note 6-3: For China RoHS compatible products, AUO will add 6 for identification.
- **Note 6-4:** The Green Mark will be presented only when the green documents have been ready by AUO Internal Green Team.

7 Mechanical Characteristics

Note:
1.TORQUE OF (4X) M3 USER HOLE BOSS SHOULD BE WITHIN 4 kg-cm AND RE-SCREW 10 TIMES,
2.LED CONNECTOR IS 3707K-S06N-21R(E&T) OR EQUIVALENT
3.TOLERANCE UNDEFINED TO BE ±0.5mm,
4.THE DIMENSION EXCLUDES DEFORMATION,
5.MODULE THICKNESS TO BE 10.8MM MAX.
6.LVDS CONNECTOR TO BE JAE FI-XB30SSRLAHF16.

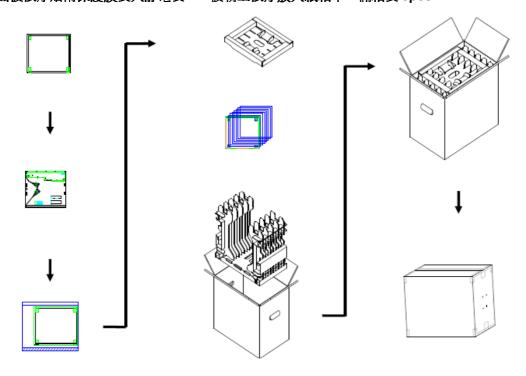
Avoid touching COF position when doing mechanical design

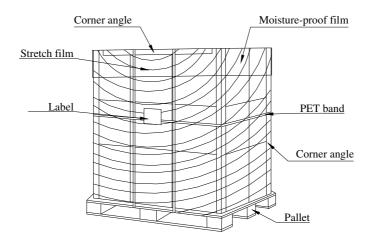


8 Packing Specification

8.1 Packing Flow

面板依序貼附保護膜裝入靜電袋,P 板朝上依序放入紙箱中,滿箱裝 8pcs





8.2 Pallet and shipment information

Item		Remark			
Item	Q'ty	Dimension	Weight(kg)		
Panel	1	358.5(H)mm × 296.5(V)mm × 10.3(D)mm	1.45		
Cushion	1	-	0.95		
Box	1	434(L)mm x 278(W)mm x 390(H)mm	0.90	without Panel & cushion	
Packing Box	8 pcs/Box	434(L)mm x 278(W)mm x 390(H)mm	13.45	with panel & cushion	
Pallet	1	1150(L)mm x 890(W)mm x 132(H)mm	12.00		
Pallet after Packing	18 boxes/pallet	1150(L)mm x 890(W)mm x 131(H)mm	334.8		